

### **REMARKS**

This Amendment is submitted in response to the Office Action mailed on April 13, 2007. Claims 24, 47 and 49 have been amended, claim 46 has been canceled without prejudice or disclaimer, and new claim 50 has been added. Claims 24-45 and 47-50 remain pending in the present application. In view of the foregoing amendments, as well as the following remarks, Applicant respectfully submits that this application is in complete condition for allowance and requests reconsideration of the application in this regard.

Applicant has amended the Abstract to overcome the Examiner's objection. Examiner's withdrawal of the objection is respectfully requested.

Claims 24, 47 and 49 have been amended to overcome the rejections under 35 U.S.C. §112, second paragraph. Independent claim 46 has been canceled and rewritten as a method claim in new independent claim 50 so the rejection of claim 46 is now moot. Examiner's withdrawal of the claim rejections under 35 U.S.C. §112, second paragraph, is respectfully requested.

Claims 47 and 48 stand rejected under 35 U.S.C. §102(b) as being anticipated by Nakagawa et al., U.S. Patent No. 5,599,743. Claims 24-46 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Song et al., U.S. Patent No. 6,821,901 in view of Perry et al., XP 000046563. Applicant respectfully traverses

the rejections for the reasons set forth below and respectfully requests that the rejections be withdrawn.

With respect to the rejection of independent claim 47 as being anticipated by Nakagawa et al., Applicant respectfully submits that Nakagawa et al. is directed to a method of manufacturing a semi-conductor device wherein a film layer comprising aluminum or an aluminum alloy is etched to form an interconnection pattern on a substrate. In the manufacturing method of Nakagawa et al., Applicant respectfully submits that the aluminum film is not used to form a mask during the etching of an underlying substrate as claimed by Applicant. Rather, according to the manufacturing method of Nakagawa et al., the underlying substrate is not etched at all but rather it is the aluminum film that is etched to form the interconnection pattern (see Col. 5, lines 46-50 and Col. 8, lines 6-12). Consequently, Applicant respectfully submits that independent claim 47 defines over Nakagawa et al. taken alone, or in combination with the other prior art of record, and the rejection of independent claim 47 should be withdrawn.

With respect to the rejection of independent claim 24 as being unpatentable over Song et al. in view of Perry et al. (XP000046563), Applicant respectfully submits that Song et al. is completely silent with respect to the claimed etch rate and distance of the substrate from the inductive coupling as recited in independent

claim 24. Applicant respectfully submits that the secondary Perry et al. reference does not fill this void.

In particular, in the dry etching process of Perry et al., the 10 cm dimension described on Page 148 at the last line of the left column refers to a widthwise dimension of a uniformity region, and not to a distance measure of the plasma source relative to the substrate as claimed by Applicant. Consequently, Perry et al. is silent with respect to the particular distance of the substrate from the plasma source as recited in independent claim 24. Moreover, Perry et al. discloses a significantly slower etch rate from 0.7 to 0.3  $\mu\text{m}/\text{min}$  (see left column of Page 149 and Figure 2(a)) than the etch rate of at least 2  $\mu\text{m}/\text{min}$  as recited in independent claim 24. Consequently, Applicant respectfully submits that independent claim 24 defines over the prior art of record and the rejection of independent claim 24 should be withdrawn.

Applicant respectfully submits that new independent claim 50 defines over the prior art of record for at least the same reasons as independent claim 24 and Examiner's allowance of same is respectfully requested.

Moreover, as claims 25-45 and 48 depend from allowable independent claims 24 and 47, respectively, and further as each of these claims recites a combination of steps not taught or suggested by the prior art of record, Applicant submits that these claims are allowable as well.

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### **Conclusion**

In view of the foregoing response including the amendments and remarks, this application is submitted to be in complete condition for allowance and early notice to this affect is earnestly solicited. If there is any issue that remains which may be resolved by telephone conference, Examiner is invited to contact the undersigned in order to resolve the same and expedite the allowance of this application.

Applicant does not believe that this response requires that any fees be submitted, however, if any fees are deemed necessary, these may be charged to Deposit Account No. 23-3000.

Respectfully submitted,

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